

Amendments to the Specification

Please add paragraph 0000 and heading RELATED APPLICATIONS prior to the heading BACKGROUND OF THE INVENTION and amend paragraphs 0081 and 0102.

RELATED APPLICATIONS

[0000] The present application is a divisional application of U.S. Patent Application Serial No. 09/948,495 which has issued as U.S. Patent No. 6,750,056 and is hereby incorporated by reference in its entirety.

[0081] As a preliminary step in the isolation of the novel metal binding proteins, *Artemia* brine shrimp were grown in artificial seawater (AS) (422.7 mM NaCl, 7.24 mM ~~KGL~~KCl, 22.58 mM MgCl₂·6H₂O, 25.52 mM MgSO₄·7H₂O, 1.33 mM CaCl₂·2H₂O and 0.476 mM NaHCO₃). *Artemia* cysts (2.5 g) were incubated for 48 hours in 250 ml of AS supplemented w/antibiotics at 30°C, rotating at 125 rpm. After 24 hrs, phototropic *Artemia* were collected, cultured for an additional 24 hrs and then collected by cloth filtration. The shrimp were weighed and if not used immediately, stored at -80°C.

[0102] Using the ~~M#MT~~ Nco I and MT Sal I primers, with an annealing temperature of 72°C for 1 min, the *Artemia MT* nucleotide sequence was amplified and then subsequently subcloned into the pGEM3 vector between the vector's Eco RI and Sal I sites. Once subcloned, the cloned metal binding protein gene can then be easily modified or further processed for use in expression, production or other methods requiring use of an isolated nucleic acid encoding a metal binding protein.